a.) Amendment to the Claims

1. (Currently Amended) A method for inhibiting a phosphodiesterase 10A (PDE10A) comprising the step of administering an effective amount of quinoline derivative represented by general formula (I)

$$\left(R^4\right)_{n} \stackrel{6}{\underset{7}{\bigvee}} \stackrel{1}{\underset{8}{\bigvee}} \stackrel{R^1}{\underset{N}{\bigvee}} R^2$$

[wherein n represents an integer of from 1 to 4, R¹ represents substituted or unsubstituted lower alkyl, -C(=Y)R9 (wherein Y represents an oxygen atom or a sulfur atom, and R9 represents a hydrogen atom, hydroxy, substituted or unsubstituted lower alkyl, substituted or unsubstituted lower alkoxy, substituted or unsubstituted aryl, a substituted or unsubstituted heterocyclic group, amino, mono-lower alkylamino or di-lower alkylamino), hydroxy, halogen, cyano, amino, mono-lower alkylamino or di-lower alkyl amino, R² represents a hydrogen atom, amino, nitro, substituted or unsubstituted lower alkyl, substituted or unsubstituted lower alkoxy, -S(O)_mR¹² (wherein R¹² represents substituted or unsubstituted lower alkyl or substituted or unsubstituted aryl, and m represents an integer of from 0 to 2), mono-lower alkylamino or di-lower alkylamino, R³ represents a hydrogen atom, halogen, hydroxy, substituted or unsubstituted lower alkyl, substituted or unsubstituted aryl or a substituted or unsubstituted heterocyclic group, or R² and R³ form a substituted or unsubstituted condensed ring together with two carbon atoms on roots thereof, and R⁴ represents a

- 2 -

hydrogen atom, halogen, cyano, amino, nitro, substituted or unsubstituted lower alkyl, substituted or unsubstituted cycloalkyl, substituted or unsubstituted lower alkoxy, - $S(O)_{ma}R^{12a}$ (wherein R^{12a} and ma have the same meanings as those of the above R^{12} and m respectively), $-C(=Y^1)R^{9a}$ (wherein Y^1 and R^{9a} have the same meanings as those of the above Y and R^9 respectively), mono-lower alkylamino or di-lower alkylamino, and when n is an integer of 2 or more, R^4 s each may be the same or different],

or a pharmaceutically acceptable salt thereof.

- 2. (Previously Presented) The method according to claim 1, wherein R^1 is substituted or unsubstituted lower alkyl, $-C(=Y)R^9$, cyano or amino, and R^2 is substituted or unsubstituted lower alkyl.
- 3. (Previously Presented) The method according to claim 1, wherein R^1 is methyl, hydroxymethyl, acetyl, carboxy, methoxycarbonyl, cyano or amino.
- 4. (Previously Presented) The method according to any one of claims 1 to 3, wherein R³ is substituted or unsubstituted aryl or a substituted or unsubstituted heterocyclic group.

- 5. (Previously Presented) The method according to any one of claims 1 to 3, wherein R³ is substituted or unsubstituted biphenylyl or substituted or unsubstituted piperazinyl.
- 6. (Previously Presented) The method according to any one of claims 1 to 3, wherein R³ is substituted or unsubstituted biphenyl-4-yl or substituted or unsubstituted piperazin-1-yl.
- 7. (Previously Presented) The method according to any one of claims

 1 to 3, wherein R³ is general formula (A)

[wherein R⁵, R⁶ and R⁷ independently represent a hydrogen atom, halogen, substituted or unsubstituted lower alkyl, substituted or unsubstituted lower alkoxy, aryl, substituted or unsubstituted lower alkanoyl or a substituted or unsubstituted heterocyclic group]

or piperazin-1-yl having substituted or unsubstituted lower alkyl or substituted or unsubstituted aryl as a substituent on the 4-position.

- 8. (Previously Presented) The method according to any one of claims 1 to 3, wherein n is 1, and R⁴ is halogen.
- 9. (Currently Amended) A quinoline derivative represented by general formula (IA)

$$\left(R^{4}\right)_{n} \stackrel{6}{\underset{7}{\bigvee}} \stackrel{1}{\underset{8}{\bigvee}} R^{1A}$$

$$\left(IA\right)$$

[wherein R^{1A} represents lower alkyl, hydroxy lower alkyl, $-C(=Y)R^{9A}$ (wherein Y represents an oxygen atom or a sulfur atom, and R^{9A} represents a hydrogen atom, lower alkyl, lower alkoxy, amino, mono-lower alkylamino or di-lower alkylamino), cyano, amino, mono-lower alkylamino or di-lower alkylamino, R^{2A} represents amino, nitro, unsubstituted lower alkyl, substituted or unsubstituted lower alkoxy, $-S(O)_mR^{12}$ (wherein R¹² represents substituted or unsubstituted lower alky; alkyl, or substituted or unsubstituted aryl, and m represents an integer of from 0 to 2), mono-lower alkylamino or di-lower alkylamino, and R^{3A} represents a substituted or unsubstituted heterocyclic group or substituted or unsubstituted aryl, or R^{2A} and R^{3A} form cycloalkane condensed with a substituted or unsubstituted benzene ring together with two carbon atoms on roots thereof, and R⁴ represents a hydrogen atom, halogen, cyano, amino, nitro, unsubstituted lower alkyl, substituted or unsubstituted lower alkoxy, $-S(O)_{ma}R^{12a}$ (wherein R^{12a} and ma have the

same meanings as R^{12} and m, respectively), $-C(=Y^1)R^{9a}$ (wherein Y^1 and R^{9a} have the same meanings as Y and R^9 , respectively), mono-lower alkylamino or di-lower alkylamino, and when n is an integer of 2 or more, R^4 s each may be the same or different, provided that when R^{1A} is hydroxymethyl or $-C(=O)R^{9B}$ (wherein R^{9B} represents a hydrogen atom, ethyloxy, n-propylamino or diethylamino), R^{3A} is not 4-cyclohexylphenyl, when R^{1A} is hydroxymethyl or $-C(=O)R^{9C}$ (wherein R^{9C} represents methoxy, amino, monolower alkylamino or di-lower alkylamino) and R^{2A} is carboxyethyl or methoxycarbonylethyl, R^{3A} is not 4-(2-fluorophehyl)phenyl nor biphenyl-4-yl, and when R^{1A} is hydroxymethyl or $-C(=O)R^{9D}$ (wherein R^{9D} represents amino or lower alkoxy) and R^{2A} is methyl, R^{3A} is not biphenyl-4-yl],

or a pharmaceutically acceptable salt thereof.

- 10. (Original) The quinoline derivative or the pharmaceutically acceptable salt thereof according to claim 9, wherein R^{3A} is substituted or unsubstituted biphenylyl or substituted or unsubstituted piperazin-1-yl.
- 11. (Original) The quinoline derivative or the pharmaceutically acceptable salt thereof according to claim 9, wherein R^{3A} is substituted or unsubstituted biphenylyl or piperazin-1-yl having substituted or unsubstituted lower alkyl or substituted or unsubstituted aryl as a substituent on the 4-position.

- 12. (Original) The quinoline derivative or the pharmaceutically acceptable salt thereof according to claim 9, wherein R^{3A} is piperazin-1-yl having substituted or unsubstituted aryl as a substituent on the 4-position.
- 13. (Previously Presented) The quinoline derivative or the pharmaceutically acceptable salt thereof according to any one of claims 9 to 12, wherein R^{1A} is lower alkyl, hydroxy lower alkyl, $-C(=O)R^{9E}$ (wherein R^{9E} represents lower alkyl or lower alkoxy) or cyano, and R^{2A} is unsubstituted lower alkyl.
- 14. (Previously Presented) The quinoline derivative or the pharmaceutically acceptable salt thereof according to any one of claims 9 to 12, wherein R^{1A} is methyl, hydroxymethyl, acetyl, methoxycarbonyl or cyano.
- $15. \qquad (Previously\ Presented)\ The\ quinoline\ derivative\ or\ the$ $pharmaceutically\ acceptable\ salt\ thereof\ according\ to\ claim\ 14,\ wherein\ n\ is\ 1,\ and\ R^4\ is$ halogen.
- 16. (Previously Presented) A method for inhibiting PDE10A comprising the step of administering an effective amount of the quinoline derivative or the pharmaceutically acceptable salt thereof according to claim 14.

Claims 17-33 (Cancelled).

- 34. (Previously Presented) The method according to any one of claim 4, wherein n is 1, and R^4 is halogen.
- 35. (Previously Presented) The method according to any one of claim 5, wherein n is 1, and R^4 is halogen.
- 36. (Previously Presented) The method according to any one of claim 6, wherein n is 1, and R^4 is halogen.
- 37. (Previously Presented) The method according to any one of claim 7, wherein n is 1, and R^4 is halogen.
- 38. (Previously Presented) The method according to claim 28, wherein R^1 is substituted or unsubstituted lower alkyl, $-C(=Y)R^9$, cyano or amino, and R^2 is substituted or unsubstituted lower alkyl.

Claims 39-48 (Cancelled).